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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/680,904	10/06/2000	Yoshinori Nagai	55300(840)	2964
21874	7590	02/24/2004	EXAMINER- BAYAT, ALI	
EDWARDS & ANGELL, LLP P.O. BOX 55874 BOSTON, MA 02205			ART UNIT 2625	PAPER NUMBER

DATE MAILED: 02/24/2004

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/680,904

Applicant(s)

NAGAI ET AL.

Examiner

Ali Bayat

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-4 and 7-12 is/are rejected.
- 7) ☒ Claim(s) 5-6 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 06 October 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. ____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>4</u> . | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-2, 4, and 7-12 are rejected under 35 U.S.C. 102(e) as being anticipated by Lawton et al. (U.S. 5,990,901).

In regard to claim 1, Lawton provides for a face image input means for inputting a face image (Fig.2 element 66 col.8 lines 51-55, note original image); a 3-D model input means for inputting one (Fig.2 element 62 col.8 lines 51-64) or a plurality of 3-D models for each of a plurality of parts; a 3-D model selection means (Fig.2 element 62 col.8 lines 51-64) for selecting a 3-D model for an arbitrary part of the plurality of parts based on an instruction input by an operator (col.7 lines 50-54); a face image mapping means for mapping the face image input via the face image input means(Fig.2 element 66 col.8 lines 51-55, note original image) to the 3-D model selected by the 3-D model selection means (Fig.2 element 62) and for displaying the mapped 3-D model (Fig.2 element 68, which directed to display memory 42a); and image generation means for generating a 3-D model selection means (Fig.2 element 62) and face image input by the face image input means(Fig.2 element 66 col.8 lines 51-55, note original image).

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With regard to claim 2, Lawton provides for an image processing device, wherein the 3-D model has information on a motion on a time series of one (Fig.2 elements 56 and 62 see library of models, which corresponds to face models, also col.8 lines 51-64) or all of the plurality of parts; and the image generation means generated a 3-D moving image using the 3-D model selected by the 3-D model selection means (Fig.2 element 62, col.8 lines 51-64) and face image input by the face image input means (Fig.2 element 66 col.8 lines 51-68).

In regard to claim 4, Lawton provides for an image processing device wherein the 3D model selection means changes a 3D model of a first part, the 3D model selection means changes a 3D model of a second part in association with the changing of the 3D model of the first part in col. 7, lines 30-54, where many parts of the model can be changed in association together with facial attributes for example.

As to claim 7. See claim 1 above. It recites similar limitation as claim 7. Except for a face image categorization means for categorizing a face image input via the face image input means (Fig.6 elements 72a, 72b and 72c col.10 line 65-col.11 line 15). Hence it is similarly analyzed and rejected.

In regard to claim 8. See claims 1 and 7. They recite similar limitation as claim 8. Except for a head model selection means for automatically selecting a 3-D model of a part corresponding to a head (Fig.7 element 76 col.10-27). Hence it is similarly analyzed and rejected.

With regard to claim 9. See claim 1 above. It recites similar limitations as claim 9. Hence it is similarly analyzed and rejected.

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As to claim 10. See claims 1 and 7. They recite similar limitations as claim 10. Except for automatically selecting a 3-D model of an input arbitrary part based on a result of the categorization by the face image categorization step (col.2 lines 10-17). Hence it is similarly analyzed and rejected.

In regard to claim 11. See claim 1 above. It recites similar limitations as claim 11. Except for a computer-readable recording medium (Fig.1 element 22). Hence it is similarly analyzed and rejected.

With regard to claim 12. See claims 1 and 7. They recite similar limitations as claim 12. Except for a computer-readable recording medium (Fig.1 element 22). Hence it is similarly analyzed and rejected.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lawton et al. (U.S. 5,990,901) in view of Murata et al. (U.S. 5,867,171).

In regard to claim 3, Lawton provides for plurality of parts include a part corresponding to a face (col.8 lines 51-64), and a part corresponding to a head (Fig.7 element 76, col.11 lines 15-22). But Lawton does not specifically provide for a part corresponding to a trunk. However in the same field of endeavor Murata teaches the above limitation. It would have been obvious to a person of ordinary skill in the art at

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time the invention was made to incorporate the teaching of Murata with the system and method of Lawton. Because Murata's invention relates to a face image data processing devices which create a face image data suitable for an age and presume the age of a created face image on the basis of same col.1 lines 9-12).

Allowable Subject Matter

3. Claims 5-6 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Other Cited References

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

U.S. patent 6,563,503 to Comair et al. is cited for object modeling for computer simulation and animation.

U.S. patent 6,188,776 to Covell et al. is cited for principle component analysis of images for the automatic location of control points.

Contact Information

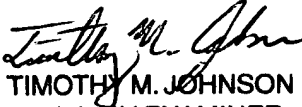
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ali Bayat whose telephone number is 703-306-5915. The examiner can normally be reached on M-Thur 9:00-7:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bhavesh Mehta can be reached on 703-3085246. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Ali bayat
Patent examiner
Group Art Unit 2625
2/22/04


TIMOTHY M. JOHNSON
PRIMARY EXAMINER